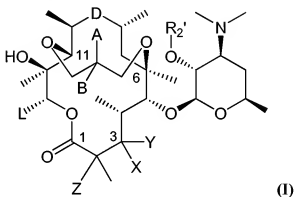


This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A compound of Formula 1, or a pharmaceutically acceptable salt or ester or prodrug thereof:



wherein:

A is

- i) -OH;
- ii) -OR<sub>p</sub>, where R<sub>p</sub> is a hydroxy protecting group;
- iii) -R<sub>1</sub>, where R<sub>1</sub> is aryl, substituted aryl, heteroaryl, or substituted heteroaryl;
- iv) -OR<sub>1</sub>, where R<sub>1</sub> is as previously defined;
- v) -R<sub>2</sub>, where R<sub>2</sub> is
  - (a) hydrogen;
  - (b) halogen;
  - (c) -C<sub>1</sub>-C<sub>6</sub> alkyl containing 0, 1, 2, or 3 heteroatoms selected from O, S or N, optionally substituted with one or more substituents selected from halogen, aryl, substituted aryl, heteroaryl, or substituted heteroaryl;
  - (d) -C<sub>2</sub>-C<sub>6</sub> alkenyl containing 0, 1, 2, or 3 heteroatoms selected from O, S, or N, optionally substituted with one or more substituents selected from halogen, aryl, substituted aryl, heteroaryl, or substituted heteroaryl; or

- (e) -C<sub>2</sub>C<sub>6</sub> alkynyl containing 0, 1, 2, or 3 heteroatoms selected from O, S or N, optionally substituted with one or more substituents selected from halogen, aryl, substituted aryl, heteroaryl, or substituted heteroaryl;
- vi) -OR<sub>2</sub>, where R<sub>2</sub> is previously defined;
- vii) -S(O)<sub>n</sub>R<sub>11</sub>, where n=0, 1 or 2, and R<sub>11</sub> is R<sub>1</sub> or R<sub>2</sub>, where R<sub>1</sub> and R<sub>2</sub> are as previously defined;
- viii) -NHC(O)R<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- ix) -NHC(O)NHR<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- x) -NHS(O)<sub>2</sub>R<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- xi) -NR<sub>14</sub>R<sub>15</sub>, where R<sub>14</sub> and R<sub>15</sub> are each independently R<sub>11</sub>, where R<sub>11</sub> is as previously defined; or
- xii) -NHR<sub>3</sub>, where R<sub>3</sub> is an amino protecting group;

B is

- i) hydrogen;
- ii) deuterium;
- iii) halogen;
- iv) -OH;
- v) -R<sub>1</sub>, where R<sub>1</sub> is as previously defined;
- vi) -R<sub>2</sub>, where R<sub>2</sub> is as previously defined; or
- vii) -OR<sub>p</sub>, where R<sub>p</sub> is as previously defined, provided that when B is halogen, -OH or OR<sub>p</sub>, A is R<sub>1</sub> or R<sub>2</sub>, where R<sub>1</sub> and R<sub>2</sub> are previously defined;

or, alternatively, A and B taken together with the carbon atom to which they are attached are

- i) C=O;
- ii) C(OR<sub>2</sub>)<sub>2</sub>, where R<sub>2</sub> is as previously defined;
- iii) C(SR<sub>2</sub>)<sub>2</sub>, where R<sub>2</sub> is as previously defined;
- iv) C[-O(CH<sub>2</sub>)<sub>m</sub>]<sub>2</sub>, where m=2 or 3;
- v) C[-S(CH<sub>2</sub>)<sub>m</sub>]<sub>2</sub>, where m is as previously defined;
- vi) C=CHR<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- vii) C=N-O-R<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- viii) C=NNHR<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- ix) C=NNHC(O)R<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- x) C=NNHC(O)NHR<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- xi) C=NNHS(O)<sub>2</sub>R<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- xii) C=NNHR<sub>3</sub>, where R<sub>3</sub> is as previously defined; or

xiii)  $C=NR_{11}$ , where  $R_{11}$  is as previously defined;

L is

- i)  $-CH_3$ ;
- ii)  $-CH_2CH_3$ ;
- iii)  $-CH(OH)CH_3$ ;
- iv)  $-C_1-C_6$  alkyl, optionally substituted with one or more substituents selected from aryl, substituted aryl, heteroaryl, or substituted heteroaryl;
- v)  $-C_2-C_6$  alkenyl, optionally substituted with one or more substituents selected from aryl, substituted aryl, heteroaryl, or substituted heteroaryl; or
- vi)  $-C_2-C_6$  alkynyl, optionally substituted with one or more substituents selected from aryl, substituted aryl, heteroaryl, or substituted heteroaryl;

D is  $-CH_2N(Q)-$ ,  $-C(O)N(R')$ -, or  $-C(OR')=N-$ , wherein  $R'$  is  $R_{11}$  as previously defined;

Q is

- i) hydrogen;
- ii)  $-C_1-C_{12}$  -alkyl,  $C_3-C_{12}$  -alkenyl, or  $C_3-C_{12}$  -alkynyl, all optionally substituted with one, two or three substituents independently selected from:
  - (a) halogen;
  - (b)  $-OR_6$ , wherein  $R_6$  is selected from:
    - 1. hydrogen;
    - 2.  $-C_1-C_{12}$  -alkyl containing 0, 1, 2, or 3 heteroatoms selected from O, S or N, optionally substituted with one, two, or three substituents independently selected from aryl, substituted aryl, heteroaryl, or substituted heteroaryl;
    - 3. aryl;
    - 4. substituted aryl;
    - 5. heteroaryl; and
    - 6. substituted heteroaryl;
  - (c)  $-NR_4R_5$ , where  $R_4$  and  $R_5$  are each independently  $R_6$ , where  $R_6$  is as previously defined, or in the alternative  $R_4$  and  $R_5$ , together with the atom to which they are attached, form a heterocycloalkyl or substituted heterocycloalkyl moiety;
  - (d)  $-N-O-R_6$ , where  $R_6$  is as previously defined;

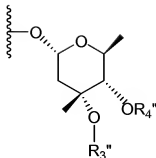
- (e) -R<sub>1</sub>, where R<sub>1</sub> is as previously defined;
- (f) -C<sub>3</sub>-C<sub>8</sub> -cycloalkyl;
- (g) substituted -C<sub>3</sub> -C<sub>8</sub> -cycloalkyl;
- (h) heterocycloalkyl;
- (i) substituted heterocycloalkyl;
- (j) -NHC(O)R<sub>6</sub>, where R<sub>6</sub> is as previously defined;
- (k) -NHC(O)OR<sub>7</sub>, where R<sub>7</sub> is selected from:
  1. -C<sub>1</sub> -C<sub>12</sub> -alkyl containing 0, 1, 2, or 3 heteroatoms selected from O, S or N, optionally substituted with one, two, or three substituents independently selected from aryl, substituted aryl, heteroaryl, or substituted heteroaryl;
  2. aryl;
  3. substituted aryl;
  4. heteroaryl; or
  5. substituted heteroaryl;
- (l) -NHC(O)NR<sub>4</sub>R<sub>5</sub>, where R<sub>4</sub> and R<sub>5</sub> are as previously defined;
- (m) -OC(O)NR<sub>4</sub>R<sub>5</sub>, where R<sub>4</sub> and R<sub>5</sub> are as previously defined;
- (n) -OC(O)R<sub>7</sub>, where R<sub>7</sub> is as previously defined;
- (o) -OC(O)OR<sub>7</sub>, where R<sub>7</sub> is as previously defined;
- (p) -OC(O)NR<sub>4</sub>R<sub>5</sub>, where R<sub>4</sub> and R<sub>5</sub> are as previously defined;
- (q) -C(O)R<sub>6</sub>, where R<sub>6</sub> is as previously defined;
- (r) -CO<sub>2</sub>R<sub>6</sub>, where R<sub>6</sub> is as previously defined; or
- (s) -C(O)NR<sub>4</sub>R<sub>5</sub>, where R<sub>4</sub> and R<sub>5</sub> are as previously defined;

X is hydrogen;

Y is

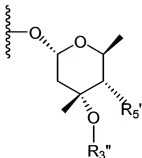
- i) hydrogen;
- ii) -OH;
- iii) -OR<sub>p</sub>, where R<sub>p</sub> is as previously defined;
- iv) -OR<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- v) -OC(O)R<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- vi) -OC(O)NHR<sub>11</sub>, where R<sub>11</sub> is as previously defined;
- vii) -S(O)<sub>n</sub>R<sub>11</sub>, where n and R<sub>11</sub> are as previously defined;

viii)



(1) where R<sub>3</sub>'' is hydrogen or methyl; R<sub>4</sub>'' is hydrogen or R<sub>p</sub>, where R<sub>p</sub> is as previously defined;

ix)



(1) where R<sub>3</sub>'' is as previously defined; R<sub>5</sub>'' is NH<sub>2</sub> or R<sub>am</sub>, where R<sub>am</sub> is protected amino;

or, in the alternative, X and Y are combined together to form oxo;

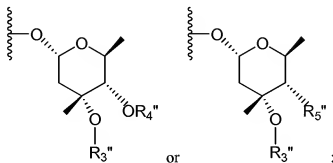
Z is

- i) hydrogen;
- ii) methyl; or
- iii) halogen; and

R<sub>2</sub>' is hydrogen or R<sub>p</sub>, where R<sub>p</sub> is as previously defined.

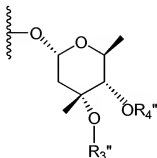
2. (currently amended) A compound according to claim 1, or a pharmaceutically acceptable salt or ester or prodrug thereof, wherein D is -CH<sub>2</sub>N(Q)-.

3. (currently amended) A compound according to claim 1, or a pharmaceutically acceptable salt or ester or ~~pro-drug~~ thereof, wherein D is  $-\text{CH}_2\text{N}(\text{Q})-$ ; X is hydrogen; and Y is



wherein  $\text{R}_3''$ ,  $\text{R}_4''$  and  $\text{R}_5''$  are each as defined in claim 1.

4. (currently amended) A compound according to claim 3, or a pharmaceutically acceptable salt or ester or ~~pro-drug~~ thereof, wherein Y is



5. (currently amended) A compound according to claim 1, or a pharmaceutically acceptable salt or ester or ~~pro-drug~~ thereof, wherein D is  $-\text{N}(\text{Q})\text{CH}_2-$  and X and Y taken together are oxo.

6. (currently amended) A compound according to claim 1, or a pharmaceutically acceptable salt or ester or ~~pro-drug~~ thereof, wherein D is  $-\text{N}=\text{CH}(\text{OR}')-$ , wherein  $\text{R}'$  is as defined in claim 1.

7. (currently amended) A compound according to claim 1, or a pharmaceutically acceptable salt or ester or ~~pro-drug~~ thereof, wherein D is  $-\text{C}(\text{O})\text{N}(\text{R}')$ , wherein  $\text{R}'$  is as defined in claim 1.

8. (currently amended) A compound according to claim 1, or a pharmaceutically acceptable salt or ester or prodrug thereof, selected from the group consisting of:

(i) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=CH_2$ , D is  $-CH_2N(Q)-$ ,  $Q = X = Z = H$ ,  $Y = OH$ ,  $L = CH_2CH_3$ ,  $R_2' = Ac$ ;

(ii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=CH_2$ ,  $D = -CHN(Q)-$ ,  $Q = Z = H$ , X and Y taken together are oxo,  $L = CH_2CH_3$ ,  $R_2' = H$ ;

(iii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached are  $C=CH_2$ ,  $D = -CH_2N(Q)-$ ,  $Q = CH_3$ ,  $X = Z = H$ ,  $Y = OH$ ,  $L = CH_2CH_3$ ,  $R_2' = H$ ;

(iv) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached are  $C=CH_2$ ,  $D = -CH_2N(Q)-$ ,  $Q = CH_3$ ,  $Z = H$ , X and Y taken together are oxo,  $L = CH_2CH_3$ ,  $R_2' = H$ ;

(v) a compound of Formula I, wherein A = H, B =  $CH_3$ ,  $D = -CH_2N(Q)-$ ,  $Q = X = Z = H$ ,  $Y = OH$ ,  $L = CH_2CH_3$ ,  $R_2' = Ac$ ;

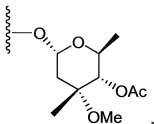
(vi) a compound of Formula I, wherein A = H, B =  $CH_3$ ,  $D = -CH_2N(Q)-$ ,  $Q = X = Z = H$ ,  $Y = OH$ ,  $L = CH_2CH_3$ ,  $R_2' = H$ ;

(vii) a compound of Formula I, wherein A = H, B =  $CH_3$ ,  $D = -CHN(Q)-$ ,  $Q = Z = H$ , X and Y taken together are oxo,  $L = CH_2CH_3$ ,  $R_2' = H$ ;

(viii) a compound of Formula I, wherein A = H, B =  $CH_3$ ,  $D = -CH_2N(Q)-$ ,  $Q = CH_3$ ,  $X = Z = H$ ,  $Y = OH$ ,  $L = CH_2CH_3$ ,  $R_2' = H$ ;

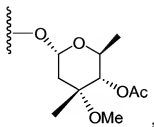
(ix) a compound of Formula I, wherein A = H, B =  $CH_3$ ,  $D = -CHN(Q)-$ ,  $Q = CH_3$ ,  $Z = H$ , X and Y taken together are oxo,  $L = CH_2CH_3$ ,  $R_2' = H$ ;

(x) a compound of Formula I, wherein A = H, B =  $CH_3$ ,  $D = -(C=NOH)-$ ,  $X = Z = H$ ,  $Y =$



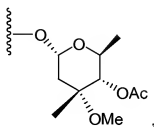
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{Ac}$ ;

(xi) a compound of Formula I, wherein  $A = \text{H}$ ,  $B = \text{CH}_3$ ,  $D = -\text{C}(=\text{O})\text{NH}-$ ,  $X = \text{Z} = \text{H}$ ,  $Y =$



$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{Ac}$ ;

(xii) a compound of Formula I, wherein  $A = \text{H}$ ,  $B = \text{CH}_3$ ,  $D = -\text{C}(=\text{O})\text{NH}-$ ,  $X = \text{Z} = \text{H}$ ,  $Y =$



$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(xiii) a compound of Formula I, wherein  $A$  and  $B$  taken together with the carbon atom to which they are attached  $= \text{C}=\text{CH}_2$ ,  $D = -\text{CHN}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{-Ph}$ ,  $\text{Z} = \text{X} = \text{H}$ ,  $\text{Y} = \text{OH}$ ,  $L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(xiv) a compound of Formula I, wherein  $A$  and  $B$  taken together with the carbon atom to which they are attached  $= \text{C}=\text{CH}_2$ ,  $D = -\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{-Ph}$ ,  $\text{Z} = \text{H}$ ,  $\text{X}$  and  $\text{Y}$  are taken together are oxo,  $L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(xv) a compound of Formula I, wherein  $A$  and  $B$  taken together with the carbon atom to which they are attached  $= \text{C}=\text{CH}_2$ ,  $D = -\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{-(2-pyridyl)}$ ,  $\text{Z} = \text{X} = \text{H}$ ,  $\text{Y} = \text{OH}$ ,  $L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(xvi) a compound of Formula I, wherein  $A$  and  $B$  taken together with the carbon atom to which they are attached  $= \text{C}=\text{CH}_2$ ,  $D = -\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{-(2-pyridyl)}$ ,  $\text{Z} = \text{H}$ ,  $\text{X}$  and  $\text{Y}$  taken together are oxo,  $L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(xvii) a compound of Formula I, wherein  $A$  and  $B$  taken together with the carbon atom to which they are attached  $= \text{C}=\text{CH}_2$ ,  $D = -\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{-(3-quinolyl)}$ ,  $\text{Z} = \text{H}$ ,  $\text{X}$  and  $\text{Y}$  taken together are oxo,  $L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;



(xviii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH<sub>2</sub>, D=CH<sub>2</sub>N(Q)-, Q = CH<sub>2</sub>-(3-quinolyl), Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xix) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH<sub>2</sub>, D = -CH<sub>2</sub>N(Q)-, Q = CH<sub>2</sub>(CH=CH)-Ph, Z = X = H, Y = OH, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xx) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH<sub>2</sub>, D = -CHN(Q)-, Q = CH<sub>2</sub>(CH=CH)-Ph, Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xxi) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH<sub>2</sub>, D = -CH<sub>2</sub>N(Q)-, Q = CH<sub>2</sub>CH=CH-(2-pyridyl), Z = X=H, Y = OH, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xxii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH<sub>2</sub>, D = -CHN(Q)-, Q = CH<sub>2</sub>CH=CH-(2-pyridyl), Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xxiii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH<sub>2</sub>, D = -CH<sub>2</sub>N(Q)-, Q = CH<sub>2</sub>C≡C-(3-quinolyl), Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xxiv) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH<sub>2</sub>, D = -CH<sub>2</sub>N(Q)-, Q = CH<sub>2</sub>C≡C-(3-quinolyl), Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xxv) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH-CH=CH-Ph, D = -CH<sub>2</sub>N(Q)-, Q = CH<sub>3</sub>, Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xxvi) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH-CH=CH-(3-pyridyl), D = -CH<sub>2</sub>N(Q)-, Q = CH<sub>3</sub>, Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xxvii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH-CH=CH-(3-quinolyl), D = -CH<sub>2</sub>N(Q)-, Q = CH<sub>3</sub>, Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xxviii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached = C=CH-(3-quinolyl), D = -CH<sub>2</sub>N(Q)-, Q = CH<sub>3</sub>, Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H; and

(xxix) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=CH-Ph$ , D =  $-CHN(Q)-$ , Q =  $CH_3$ , Z = H, X and Y taken together are oxo, L =  $CH_2CH_3$ ,  $R_2' = H$ .

(xxx) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=CH_2$ , D is  $-CH_2N(Q)-$ , Q = X = Z = H, Y = OH, L =  $CH_2CH_2CH_3$ ,  $R_2' = H$ ;

(xxxi) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=CH_2$ , D is  $-CH_2N(Q)-$ , Q =  $CH_2CH_2CH_3$ , X = Z = H, Y = OH, L =  $CH_2CH_3$ ,  $R_2' = H$ ;

(xxxii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=CH_2$ , D is  $-CH_2N(Q)-$ , Q =  $CH_2CH_2CH_3$ , Z = H, X and Y taken together are oxo, L =  $CH_2CH_3$ ,  $R_2' = H$ ;

(xxxiii) a compound of Formula I, wherein A = H, B =  $CH_3$ , D =  $-CH_2N(Q)-$ , Q =  $CH_2CH_2CH_3$ , Z = H, X and Y taken together are oxo, L =  $CH_2CH_2CH_3$ ,  $R_2' = H$ ;

(xxxiv) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=O$ , D is  $-CH_2N(Q)-$ , Q = Z = H, X and Y taken together are oxo, L =  $CH_2CH_3$ ,  $R_2' = H$ ;

(xxxv) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=O$ , D is  $-CH_2N(Q)-$ , Q =  $CH_3$ , Z = H, X and Y taken together are oxo, L =  $CH_2CH_3$ ,  $R_2' = H$ ;

(xxxvi) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=O$ , D is  $-CH_2N(Q)-$ , Q =  $CH_2CH_2CH_3$ , Z = H, X and Y taken together are oxo, L =  $CH_2CH_3$ ,  $R_2' = H$ ;

(xxxvii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=N-OH$ , D is  $-CH_2N(Q)-$ , Q = Z = H, X and Y taken together are oxo, L =  $CH_2CH_3$ ,  $R_2' = H$ ;

(xxxviii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=N-OH$ , D is  $-CH_2N(Q)-$ , Q =  $CH_3$ , Z = H, X and Y taken together are oxo, L =  $CH_2CH_3$ ,  $R_2' = H$ ;

(xxxix) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $C=N-OH$ , D is  $-CH_2N(Q)-$ , Q =  $CH_2CH_2CH_3$ , Z = H, X and Y taken together are oxo, L =  $CH_2CH_3$ ,  $R_2' = H$ ;

(xli) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is C=N-O-R<sub>11</sub>, R<sub>11</sub> = [5-(6-aminopyrid-2-yl)thien-2-yl]methyl, D is -CH<sub>2</sub>N(Q)-, Q = Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xlii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is C=N-O-R<sub>11</sub>, R<sub>11</sub> = [5-(6-aminopyrid-2-yl)thien-2-yl]methyl, D is -CH<sub>2</sub>N(Q)-, Q = CH<sub>3</sub>, Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

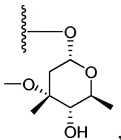
(xliii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is C=N-O-R<sub>11</sub>, R<sub>11</sub> = [5-(6-aminopyrid-2-yl)thien-2-yl]methyl, D is -CH<sub>2</sub>N(Q)-, Q = CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xliv) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is C=N-O-R<sub>11</sub>, R<sub>11</sub> = [2-(pyrazol-1-yl)pyrid-5-yl]methyl, D is -CH<sub>2</sub>N(Q)-, Q = Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xlv) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is C=N-O-R<sub>11</sub>, R<sub>11</sub> = [2-(pyrazol-1-yl)pyrid-5-yl]methyl, D is -CH<sub>2</sub>N(Q)-, Q = CH<sub>3</sub>, Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

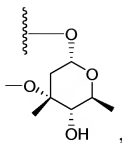
(xlvi) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is C=N-O-R<sub>11</sub>, R<sub>11</sub> = 5-[2-(pyrazol-1-yl)pyrid-5-yl]methyl, D is -CH<sub>2</sub>N(Q)-, Q = CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, Z = H, X and Y taken together are oxo, L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xlvii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is C=CH<sub>2</sub>, D is -CH<sub>2</sub>N(Q)-, Q = X = Z = H, Y =



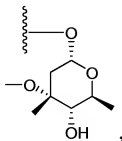
L = CH<sub>2</sub>CH<sub>3</sub>, R<sub>2</sub>' = H;

(xlviii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is C=CH<sub>2</sub>, D is -CH<sub>2</sub>N(Q)-, Q = CH<sub>3</sub>, X = Z = H, Y =



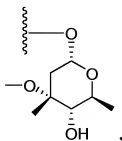
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(xlvi) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{CH}_2$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{CH}_2\text{CH}_3$ ,  $\text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



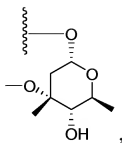
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(xlvii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [5-(6\text{-aminopyrid-2-yl})\text{thien-2-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



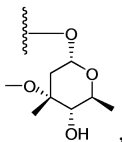
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(l) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [5-(6\text{-aminopyrid-2-yl})\text{thien-2-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_3$ ,  $\text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



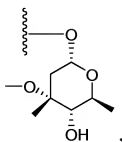
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(li) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [5-(6\text{-aminopyrid-2-yl})\text{thien-2-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{CH}_2\text{CH}_3$ ,  $\text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



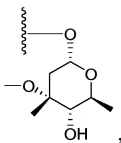
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(lii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [2\text{-(pyrazol-1-yl)pyrid-5-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



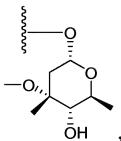
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(liii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [2\text{-(pyrazol-1-yl)pyrid-5-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_3$ ,  $\text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



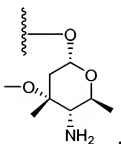
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(liv) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [2-(\text{pyrazol-1-yl})\text{pyrid-5-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{CH}_2\text{CH}_3$ ,  $\text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



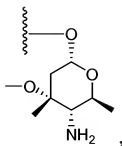
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(lvi) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [5-(6\text{-aminopyrid-2-yl})\text{thien-2-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



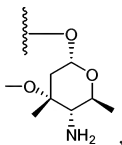
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(lvi) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = 2-[5-(6\text{-aminopyrid-2-yl})\text{thien-2-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_3$ ,  $\text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



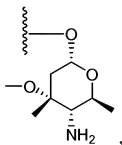
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(lvii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [5-(6\text{-aminopyrid-2-yl})\text{thien-2-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{CH}_2\text{CH}_3$ ,  $\text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



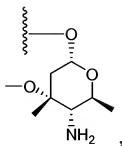
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(lviii) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = 5-[2-(\text{pyrazol-1-yl})\text{pyrid-5-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



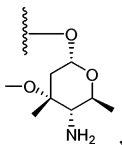
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ;

(lix) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [2-(\text{pyrazol-1-yl})\text{pyrid-5-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_3$ ,  $\text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$



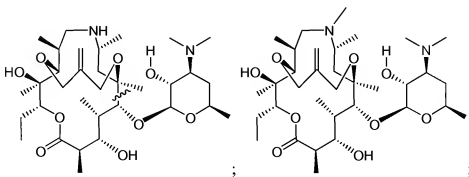
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ ; and

(lx) a compound of Formula I, wherein A and B taken together with the carbon atom to which they are attached is  $\text{C}=\text{N}-\text{O}-\text{R}_{11}$ ,  $\text{R}_{11} = [2-(\text{pyrazol-1-yl})\text{pyrid-5-yl}]\text{methyl}$ , D is  $-\text{CH}_2\text{N}(\text{Q})-$ ,  $\text{Q} = \text{CH}_2\text{CH}_2\text{CH}_3$ ,  $\text{X} = \text{Z} = \text{H}$ ,  $\text{Y} =$

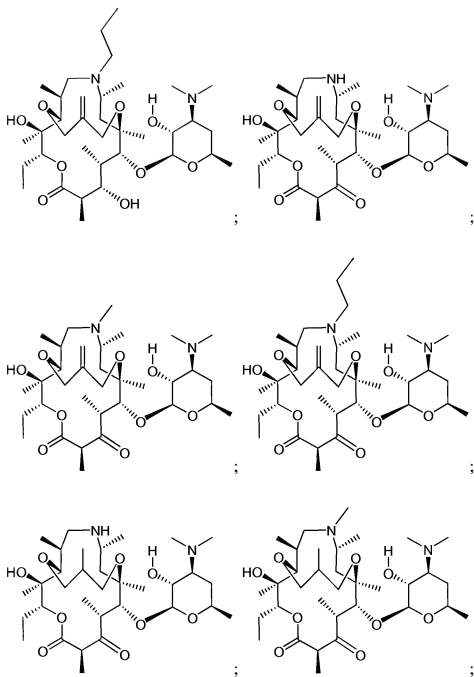


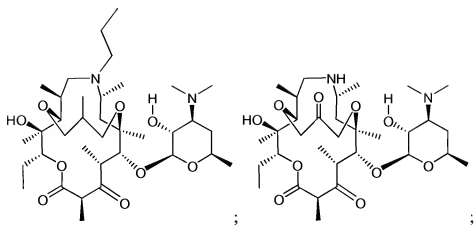
$L = \text{CH}_2\text{CH}_3$ ,  $R_2' = \text{H}$ .

9. (currently amended) A compound according to claim 1, or a pharmaceutically acceptable salt or ester or prodrug thereof, selected from the group consisting of:

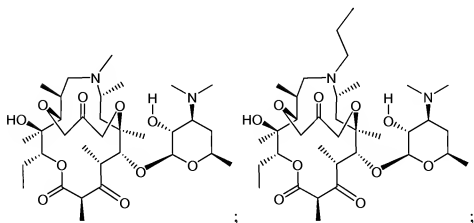




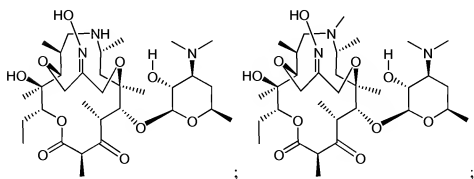




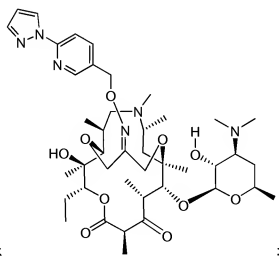
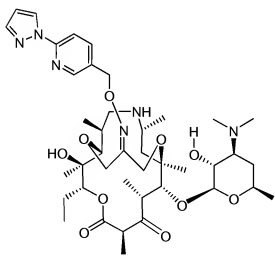
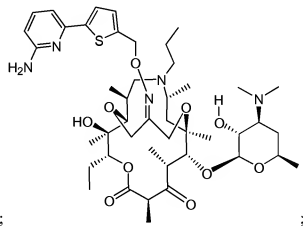
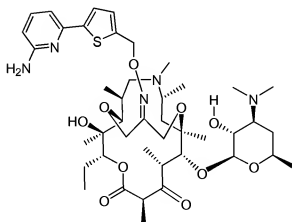
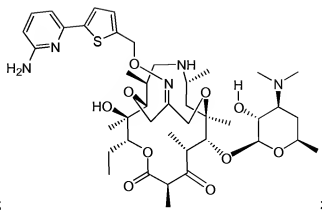
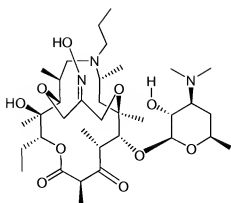
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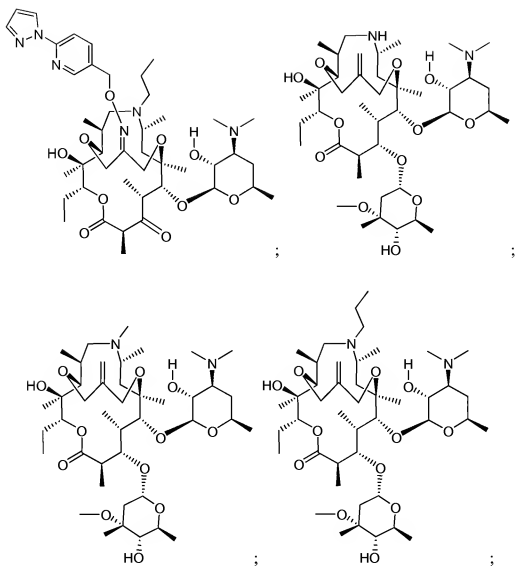


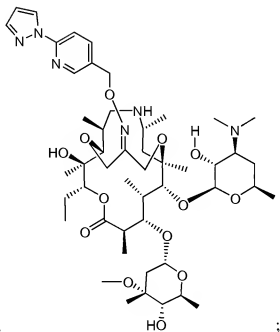
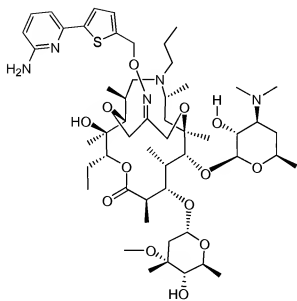
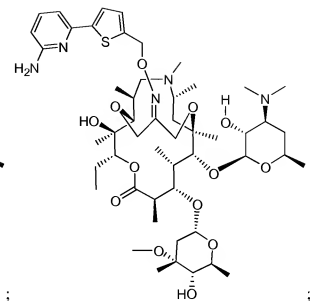
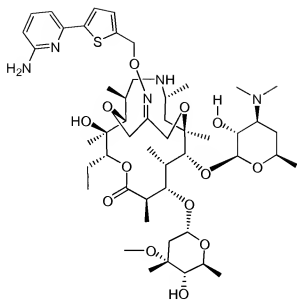
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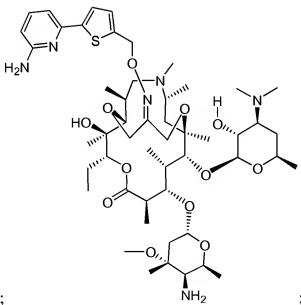
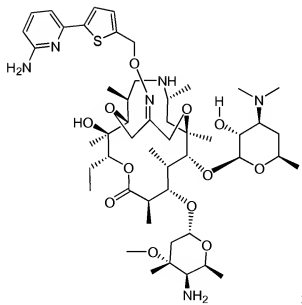
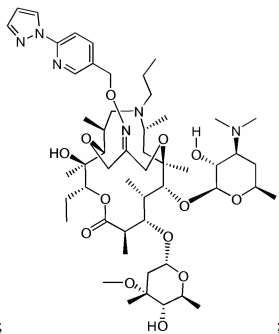
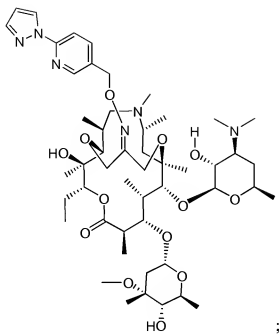


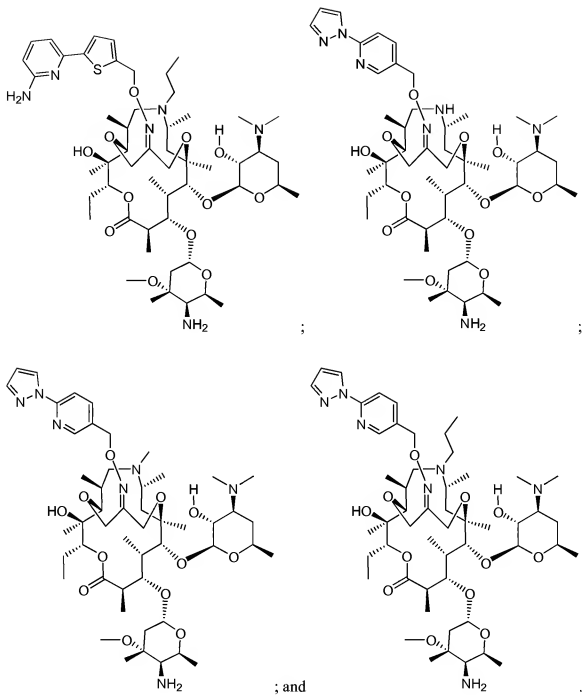
;











10. (currently amended) A pharmaceutical composition comprising:

- (i) a compound of Formula I as defined in claim 1, or a pharmaceutically acceptable salt or ester or prodrug thereof, in an amount effective for treating or preventing a bacterial infection; and

(ii) a pharmaceutically acceptable carrier.

11. (currently amended) A pharmaceutical combination of

(i) a compound of Formula I as defined in claim 1, or a pharmaceutically acceptable salt or ester ~~or prodrug~~ thereof, and

(ii) an antibacterial agent other than a compound of Formula I or a salt, ester or prodrug thereof;

wherein the compound of Formula I or its pharmaceutically acceptable salt or ester ~~or prodrug~~ and the antibacterial agent are each employed in an amount that renders the combination effective for treating ~~or preventing~~ a bacterial infection.

12. (currently amended) A method for treating ~~or preventing~~ a bacterial

infection in a subject in need thereof, which comprises administering to the subject a therapeutically ~~or prophylactically~~ effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or ester ~~or prodrug~~ thereof.

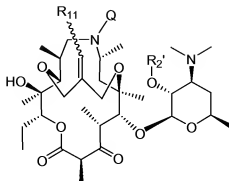
13. (currently amended) A method for treating ~~or preventing~~ a bacterial

infection in a subject in need thereof, which comprises administering to the subject a therapeutically ~~or prophylactically~~ effective amount of a pharmaceutical composition according to claim 10.

14. (currently amended) A method for treating ~~or preventing~~ a bacterial

infection in a subject in need thereof, which comprises administering to the subject a therapeutically ~~or prophylactically~~ effective amount of a pharmaceutical combination according to claim 11.

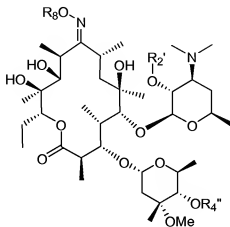
15. (original) A process for the preparation of a compound of formula:



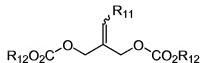


wherein Q and R<sub>2</sub>' are each as defined in claim 1, which comprises:

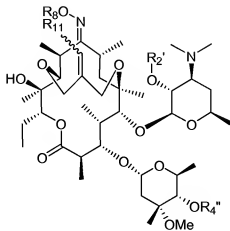
- (1) reacting a compound of formula:



with an alkylating agent of formula:



in the presence of a phosphine ligand and Pd(O) catalyst under reflux conditions to prepare a compound of the Formula:



wherein:

R<sub>8</sub> is

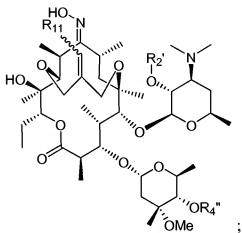
- hydrogen,
- CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>OCH<sub>3</sub>,
- CH<sub>2</sub>O(CH<sub>2</sub>O)<sub>n</sub>CH<sub>3</sub> where n is zero, 1 or 2;
- C<sub>1</sub>-C<sub>12</sub> alkyl, optionally substituted with one or more substituents selected from aryl, substituted aryl, heteroaryl and substituted heteroaryl;

- e. -C<sub>3</sub>-Cl<sub>2</sub> cycloalkyl;
- f. -C(O)-C<sub>1</sub>-C<sub>12</sub> alkyl;
- g. -C(O)-C<sub>3</sub>-C<sub>12</sub> cycloalkyl;
- h. -C(O)-R<sub>1</sub>, where R<sub>1</sub> is as previously defined; or
- i. -Si(R<sub>a</sub>)(R<sub>b</sub>)(R<sub>c</sub>), wherein R<sub>a</sub>, R<sub>b</sub> and R<sub>c</sub> are each independently selected from C<sub>1</sub>-C<sub>12</sub> alkyl, aryl and substituted aryl;

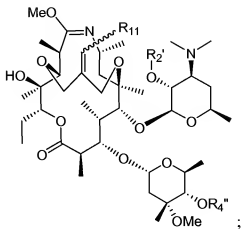
R<sub>2</sub>' and R<sub>4</sub>" are as previously defined in claim 1; and

R<sub>11</sub> is as defined in claim 1 and R<sub>12</sub> is C<sub>1</sub>-C<sub>12</sub> alkyl;

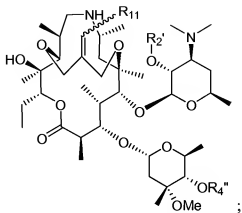
(2) treating the compound obtained in step (1) with an aqueous base to obtain the Z-oxime of formula:



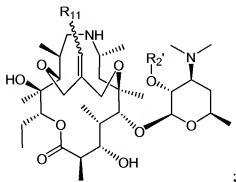
(3) reacting the compound prepared in step (2) with an oxime activating agent and quenching with methanol to prepare a compound of formula:



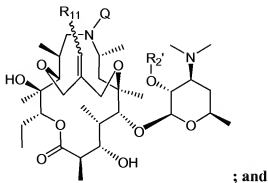
(4) reacting the compound prepared in step (3) with a reducing agent to prepare compound of formula:



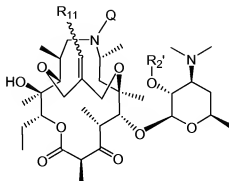
(5) reacting the compound prepared in step (4) with a mild acid to prepare a compound of formula:



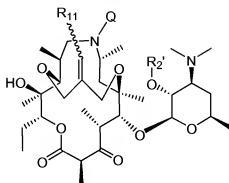
(6) reacting the compound prepared in step (5) with an agent containing the group Q selected from the group consisting of an alkylating agent, an alkyl halide in the presence of a base, and an aldehyde via reductive amination in the presence of NaCNBH<sub>3</sub> to prepare a compound of formula:



(7) oxidizing the hydroxyl in the 3 position of the compound prepared in step (6) via Dess-Martin oxidation, Corey-Kim oxidation, or a Moffat oxidation to prepare a compound of formula:

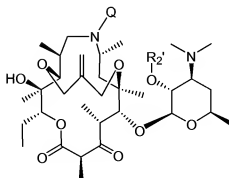


16. (original) A process of preparing compounds of formula:



which comprises

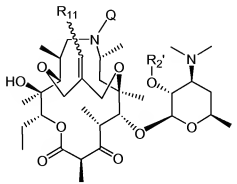
(a) reacting a compound of formula:



with CH<sub>2</sub>=CH-R<sub>11</sub> in the presence of a ruthenium catalyst;

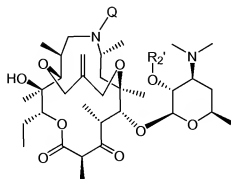
wherein Q, R<sub>2</sub>' and R<sub>11</sub> are each as defined in claim 1.

17. (original) A process of preparing compounds of formula:



which comprises

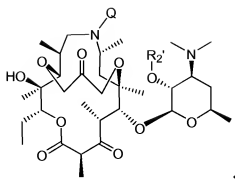
(a) reacting a compound of formula:



with R<sub>11</sub>-halide under Heck coupling conditions using a palladium catalyst optionally with a phosphine ligand;

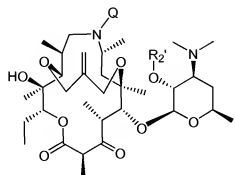
wherein Q and R<sub>2</sub>' are each as defined in claim 1; and R<sub>11</sub> is aryl, substituted aryl, or C<sub>1</sub>-C<sub>6</sub> alkyl substituted with aryl or substituted aryl.

18. (original) A process of preparing a compound of the Formula:



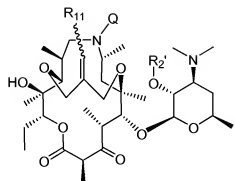
which comprises:

- (a) performing ozonolysis on a compound of formula:



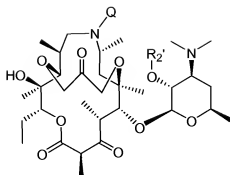
wherein Q and R<sub>2</sub>' are each as defined in claim 1.

19. (original) A process of preparing a compound of formula:



which comprises:

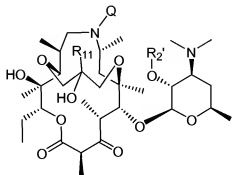
- (a) reacting a compound of formula:



with a phosphoylid under Wittig conditions;

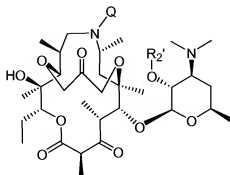
wherein Q, R<sub>2</sub>', and R<sub>11</sub> are as defined in claim 1.

20. (original) A process of preparing a compound of formula:



which comprises:

(a) reacting a compound of formula:



with a Grignard reagent containing the R<sub>11</sub> group;

wherein Q, R<sub>2</sub>', and R<sub>11</sub> are as defined in claim 1.